

### **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed June 11, 2007. The Examiner is thanked for the thorough examination of the present application. Upon entry of this response, claims 15-34 are pending in the present application. Claims 15-25, 27, and 31-34 are objected to because of various informalities. Furthermore, the Office Action puts forth the following rejections:

**(1) 35 U.S.C. §102**

- a. Claims 32 and 33 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by *Buer et al.* (U.S. Pat. No. 6,188,257, hereinafter "*Buer*").
- b. Claims 15, 26, 28, and 29 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by *Kamoi et al.* (U.S. Pat. No. 6,026,098).

**(2) 35 U.S.C. §103**

- a. Claim 18 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Kodra* (U.S. Pat. No. 6,226,663).
- b. Claim 17 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Cummiskey* (U.S. Pat. No. 4,353,128).
- c. Claims 16 and 19 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi*.
- d. Claim 21 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Shimakaki et al.* (U.S. Pat. No. 5,623,497, hereinafter "*Shimakaki*").

- e. Claim 27 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Bartelink* (U.S. Pat. No. 4,390,750).
- f. Claim 31 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Buer*.
- g. Claim 34 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Buer*.

Applicants respectfully request consideration of the following remarks contained herein. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

#### **I. Claim of Priority**

Applicants note that the cross-reference section of the present application (as reflected in the published application) is incorrect and does not reflect the claim of priority made in the preliminary amendment filed February 25, 2004 (the same day the application for the present invention was filed). Furthermore, the Utility Patent Application Transmittal sheet (Form PTO/SB/05) filed February 25, 2004 indicated that the present invention is a divisional of U.S. patent application serial number 09/640,123, filed August 16, 2000 (now U.S. Patent No. 6,765,954). As such, Applicants submit that a claim of priority was timely perfected. Applicants further request that the amendments to the specification indicated above be entered.

## **II. Allowable Subject Matter**

Applicants would like to thank Examiner Corrielus for indicating that claims 20, 22-25, and 30 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. (Office Action, pages 7-8). At this time, however, Applicants have elected not to amend all the claims to incorporate the allowable subject matter. Applicants respectfully request consideration of the arguments below. Applicants have, however, incorporated the allowable subject matter defined in claim 30 (and intervening claim 28) into claim 26, as discussed below.

## **III. Response to Claim Objections**

On page 2, the Office Action objects to claims 15-25, 27, and 31-34 because of various informalities. As indicated above, Applicants have amended these claims and respectfully request that the objections be withdrawn.

## **IV. Response to Claim Rejections Under 35 U.S.C. § 102**

Claims 32 and 33 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by *Buer*. Claims 15, 26, 28, and 29 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by *Kamoi*. For at least the reasons set forth below, Applicants traverse these rejections.

### **Independent Claim 32**

Applicants respectfully submit that independent claim 32 patently defines over *Buer* for at least the reason that *Buer* fails to disclose, teach or suggest the features emphasized below in claim 32.

Claim 32, as amended, recites (emphasis added):

32. **A transmission unit**, comprising:  
a signal integrity supervisor configured to generate a response to a digital data stream having an anomalous condition, **the signal integrity supervisor further configured to forward the response to at least one of:**  
**control logic capable of resetting the transmission unit,**  
**a line driver within the transmission unit, wherein the**  
**response powers down the line driver, and**  
**devices external to the transmission unit.**

Applicants have amended claim 32 to further define certain aspects of the claimed embodiment and respectfully submit that claim 32 defines over the cited *Buer* reference. Specifically, *Buer* fails to teach of a transmission unit comprising a signal integrity supervisor configured to forward the response to at least one of: control logic capable of resetting the transmission unit, a line driver within the transmission unit, wherein the response powers down the line driver, and devices external to the transmission unit.

*Buer* generally relates to power-on-reset logic with secure power down capability. While *Buer* teaches that “[t]he low frequency monitor causes the reset signal to be issued when a frequency of the system clock is below a predetermined low-frequency threshold” (Col. 1, line 66 – Col. 2, line 2), *Buer* fails to even teach of a transmission unit. Applicants appreciate the fact that preambles are typically not given any weight in determining patentability. However, in appropriate circumstances (as in the present circumstance), the preambles ARE to be given patentable weight. Specifically, proper claim construction also includes the determination of whether language included in the preamble of the claim is to be given the same weight as the language that makes up the body of the claim. In this regard, the preamble may be limiting “when the claim drafter

chooses to use both the preamble and the body to define the subject matter of the claimed invention.” *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995).

Notwithstanding, Applicants have amended the claim and submit that *Buer* fails to teach of forwarding the signal (allegedly the reset signal taught by *Buer*) to one or more of the following: control logic, a line driver, and devices external to the transmission unit. *Buer* fails to teach this element. Accordingly, Applicants respectfully submit that independent claim 32 patentably defines over *Buer* for at least the reason that *Buer* fails to disclose, teach or suggest the highlighted features in claim 32 above.

#### **Dependent Claims 33-34**

Applicants submit that dependent claims 33-34 are allowable for at least the reason that these claims depend from an allowable independent claim. *See, e.g., In re Fine*, 837 F. 2d 1071 (Fed. Cir. 1988).

#### **Independent Claim 15**

Applicants respectfully submit that independent claim 15 patentably defines over *Kamoi* for at least the reason that *Kamoi* fails to disclose, teach or suggest the features emphasized below in claim 15.

Claim 15, as amended, recites (emphasis added):

15. **A transmission signal integrity supervisor within an analog front end (AFE), wherein the transmission signal integrity supervisor is configured to detect anomalous conditions and protect the AFE,** the transmission signal integrity supervisor comprising:

a clock detector configured to receive a clock signal input and generate a first output signal in response to an at least one clock signal input anomalous condition, **wherein the clock detector is further**

**configured to forward the first output signal to at least one of control logic and devices external to the AFE;** and

a data supervisor configured to receive a digital data stream and generate a second output signal in response to an at least one digital data stream anomalous condition, **wherein the data supervisor is further configured to forward the second output signal to at least one of a line driver within the AFE and devices external the AFE.**

Applicants respectfully submit that the rejections have been rendered moot by the amendment to independent claim 1 as the cited *Kamoi* reference fails to teach the elements emphasized above in claim 1. The preamble of claim 1 now includes the following language: "A transmission signal integrity supervisor within an analog front end (AFE), wherein the transmission signal integrity supervisor is configured to detect anomalous conditions and protect the AFE." As discussed above, while Applicants appreciate the fact that preambles are typically not given any weight in determining patentability, in appropriate circumstances (as in the present circumstance), the preambles ARE to be given patentable weight.

Claim 1 has also been amended to further define both the clock detector and the data supervisor. Specifically, claim 1, as amended, recites the following elements: "wherein the clock detector is further configured to forward the first output signal to at least one of control logic and devices external to the AFE" and "wherein the data supervisor is further configured to forward the second output signal to at least one of a line driver within the AFE and devices external the AFE."

*Kamoi*, which relates to a multiplexing system provided in a line terminating unit of an ATM switch which accommodates a plurality of physical lines (*Kamoi*, Field of the Invention), fails to teach of both a clock detector configured to forward the first output signal to at least one of control logic and devices external to the analog front end, and a

data supervisor configured to forward the second output signal to at least one of a line driver within the AFE and devices external the AFE.

Accordingly, Applicants respectfully submit that independent claim 15 patently defines over *Buer* for at least the reason that *Buer* fails to disclose, teach or suggest the highlighted features in claim 15 above.

### **Dependent Claims 16-25**

Applicants submit that dependent claims 33-34 are allowable for at least the reason that these claims depend from an allowable independent claim. *See, e.g., In re Fine*, 837 F. 2d 1071 (Fed. Cir. 1988).

### **Independent Claim 26**

Applicants respectfully submit that independent claim 26 patently defines over *Kamoi* for at least the reason that *Kamoi* fails to disclose, teach or suggest the features emphasized below in claim 26.

Claim 26, as amended, recites (emphasis added):

26. A circuit, comprising:

means for monitoring a digital data stream, **wherein the means for monitoring a digital data stream comprises a signal integrity supervisor;** and

means for generating an output signal in response to an anomalous condition in the digital data stream, **wherein the means for generating an output signal is responsive to a digital data stream having a number of consecutive data values of equal magnitude wherein the number of consecutive data values reaches a predetermined maximum value.**

In reliance on the admittedly patentable subject matter, Applicants have incorporated the allowable subject matter defined in claim 30 (and intervening claim 28)

into claim 26. Claims 28 and 30 have been canceled, and claims 29 and 31 have been amended to now depend from claim 26. Accordingly, Applicants respectfully submit that the §102 rejection is rendered moot by the amendment. Applicants request that claim 26 be placed in condition for allowance.

**Dependent Claims 27, 29, and 31**

Applicants submit that dependent claims 27, 29, and 31 are allowable for at least the reason that these claims depend from an allowable independent claim. *See, e.g., In re Fine*, 837 F. 2d 1071 (Fed. Cir. 1988).

**V. Response to Claim Rejections Under 35 U.S.C. § 103**

Claim 18 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Kodra*. Claim 17 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Cummiskey*. Claims 16 and 19 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi*. Claim 21 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Shimakaki*. Claim 27 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Bartelink*. Claim 31 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kamoi* in view of *Buer*. Claim 34 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Buer*.

As indicated above, for at least the reason that these claims depend from allowable independent claims, Applicants respectfully submit that these claims should be placed in condition for allowance.

**CONCLUSION**

Applicants respectfully submit that all pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 50-0835.

Respectfully submitted,

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